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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/633,332	07/31/2003	Ernest D. Miller	26669/4:2	4195

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EXAMINER

WILLIAMS, THOMAS J

ART UNIT PAPER NUMBER

3683

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/633,332

Applicant(s)

MILLER, ERNEST D.

Examiner

Thomas J. Williams

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 August 2005.
- 2a) ☒ This action is FINAL. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-10 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date <u>8/18/05</u> . | 6) <input type="checkbox"/> Other: _____  |

### DETAILED ACTION

1. Acknowledgment is made in the receipt of the information disclosure statement and the amendment filed August 18, 2005.

#### *Claim Rejections - 35 USC § 102*

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-10 are rejected under 35 U.S.C. 102(b) as being anticipated by US 3,251,076 to Burke.

Re-claims 1 and 4, Burke discloses in figures 13-16 a micro-support cushion system, comprising: a planer base 310, or base sheet and top sheet; a plurality of spring structures 300 arranged on the base or the respective sheets; each spring structure comprises a top compression layer 304 with a contact surface area and a corresponding bottom compression layer 302 with a contact area, both layers are formed of compressible materials, the spring structures are substantially aligned with one another; each bottom layer 302 has a larger contact surface (due to the step surfaces) than the top layer 304 thereby providing a higher compression rate than the top layer (see column 10 lines 37-49 and column 4 lines 6-11); the compression layers are aligned, in use once the top layer is compressed, additional force applied to the top layer 304 is substantially transferred through the top layer to the bottom layer.

Re-claim 2, the spring structures are interconnected.

Re-claim 3, the pattern is such that the spring structures are spaced from one another and thus are capable of being spaced apart by 0.25 inches.

Re-claim 5, the compression structure comprises concentric cylinders.

Re-claim 6, the compression structure comprises a plurality of frustum shaped layers, see figure 14.

Re-claim 7, Burke discloses a layered spring assembly comprising: a layered spring structure and a corresponding compression structure formed from compressible materials, the structures are aligned with each other, the spring structure is layered with progressively larger contact areas for contacting the corresponding compression structure, see figure 14 and column 4 lines 6-11.

Re-claims 8 and 9, the compression structure is substantially flat (each layer of 302 is flat); the compression structure is layered.

Re-claim 10, the spring structure 304 includes an integrally formed central plunger; the compression structure 302 includes a recess sized to receive the plunger; the plunger has a length greater than the height of the recess (note the interaction between the plunger and the step portions of the recess), the plunger is compressed when fully engaged in the recess.

4. Claims 4-9 are rejected under 35 U.S.C. 102(b) as being anticipated by US 4,521,979 to Blaser.

Re-claim 4, Blaser discloses a micro-support structure comprising: a base sheet 14 or 25 and a top sheet 14 or 25; a plurality of spring structures are formed on the base sheet (as in figure 4c of the instant application); a plurality of compression structures (such as 15) are formed on the top sheet, the compression structures are aligned over the spring structures, such as pad 25.

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Re-claims 5 and 6, the compression structure 15 comprises concentric cylinders 17, 18, the cylinders have frustum shaped layers, see figure 5.

Re-claim 7, Burke discloses a layered spring assembly comprising: a layered spring structure and a corresponding compression structure formed from compressible materials, the structures are aligned with each other, the spring structure is layered with progressively larger contact areas for contacting the corresponding compression structure, see figures 5, 6, 14 and 16.

Re-claims 8 and 9, the compression structure is substantially flat (when interpreting the compression structure as 25, this is consistent with figure 4c in the instant application); the compression structure is layered (when interpreting the compression structure as 15).

#### ***Response to Arguments***

5. Applicant's arguments filed August 18, 2005 have been fully considered but they are not persuasive. With regards to claims 1-3 and 7-10, it is the opinion of the examiner that the claim limitations have been addressed. The arguments submitted by the applicant appear to be more specific than the claim language. The claim merely states a top and bottom aligned spring structure, with one of the structures having a larger contact surface area. The stepped portions in Burke are interpreted as providing a progressively larger contact area for contacting the corresponding compression structure. It is the opinion of the examiner that Burke, when broadly interpreted, meets the recited limitations. With regards to claims 4-6, clearly the stepped portion provides a layered structure. With regards to Blaser, it is noted that figure 16 is substantially identical to figure 4C in the instant application and is thus interpreted as capable of performing the recited features.

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***Conclusion***

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

7. Any inquiries concerning this communication or earlier communications from the examiner should be directed to Thomas Williams whose telephone number is 571-272-7128. The examiner can normally be reached on Monday-Thursday from 6:30 AM to 4:00 PM. The examiner can also be reached on alternate Fridays.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor, can be reached at 571-272-7095. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 571-272-6584.

TJW

September 29, 2005

THOMAS WILLIAMS  
PATENT EXAMINER

Thomas Williams  
AU 3683  
9-29-05